



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

March 4, 2004

Mr. Kelly Wright
Andrews, Miller & Associates, Inc.
401 Academy Street, Suite 1
Cambridge, MD 21613

RE: PLUS review – Mid – Atlantic Biodiesel Plant

Dear Mr. Wright:

Thank you for meeting with State agency representatives on February 19, 2004 to discuss the Mid-Atlantic Biodiesel Plant project proposed for 2.43 acres along School Lane in Clayton.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the State agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that the Town of Clayton is the governing authority over this land; therefore, you will need to comply with any and all regulations/restrictions set forth by the Town.

State agency comments received regarding this project are as follows:

Department of Natural Resources and Environmental Control

Water Supply

If dewatering is necessary during the construction phase, well construction permits must be obtained. Please allow four to six weeks for processing well permit applications. You can contact the Water Supply Branch at (302) 739-4793 for more information.

Wastewater

Connection to the public sewer from the City of Clayton is proposed.

Soils

According to the Kent County soil survey, Sassafras and Woodstown were mapped in the vicinity of subject parcel. Sassafras is a well-drained upland soil that has few limitations for development. Woodstown is a moderately well-drained soil of low-lying uplands that has moderate limitations for development.

No wetland associated (hydric) soils were apparent from the available soil maps.

Groundwater Recharge Potential

According to the Groundwater Recharge Potential map for Kent County the project appears to be within a fair to good recharge area. It is important to attempt to reduce or mitigate the amount of impervious surface and to minimize near surface pollutant sources and increased surface water runoff.

TMDLs

The project is located within the Delaware Bay watershed. This watershed will be subject to a Total Maximum Daily Load Regulations in 2007. To assist in the improvement of water quality, the developer is encouraged to employ best available technologies (BATs) and/or best management practices (BMPs) as a means to reduce impacts associated with development.

Air Permits

Air permits would be required for any emissions to the atmosphere or to the inlet loading of an air pollution control device which are greater than or equal to 10 pounds in any single day. If emissions are equal to 0.2 pound and less than 10 pounds in any single day, the emissions would be registered instead.

Boilers rated at equal to or greater than 10 MMBTU/hr fired on any fuel require a permit. There is a clean fuel possibility: If the boiler is rated at equal to or greater than 15 MMBTU/hour and is fired on natural gas or LPG fuel only, a permit would be required.

For emergency generators rated at 186hp, a permit would be required in Kent County.

The State of Delaware Air regulations are available at this link:

http://www.dnrec.state.de.us/air/aqm_page/regs.htm

Applications are available at this link, but are listed under forms and applications:

<http://www.dnrec.state.de.us/DNREC2000/Divisions/AWM/AWM.htm>

If you have any questions, please contact Nancy Terranova at 739-4791.

It is very likely that a construction permit will be required prior to the construction of such a facility. The length of time needed to issue such a permit depends on the type permit needed. The worst case is that a New Source Review permit is required which typically takes 6 to 9 months to issue from the time a complete application is received. If someone wants to discuss this permitting further, please contact Bob Taggart at (302) 323-4542.

Aboveground Storage Tanks

With the construction of Aboveground Storage Tanks the following will have to be addressed:

- Aboveground Storage Tanks containing kerosene, heating fuel, diesel or diesel mixtures above 250 gallons must be registered with the Department
- Aboveground Storage Tanks greater than 39,999 containing kerosene, heating fuel, diesel or diesel mixtures must comply with the full AST regulations
- Any product or material other than kerosene, heating fuel, diesel or diesel mixtures that is a regulated substance which is stored in a tank with a capacity of 12,500 gallons or greater must be registered with the Department and comply with the full AST Regulations

Aboveground Storage Tanks that are exempt from the registration process and the AST regulations:

- Farm tanks less than 1,100 gallons
- Propane tanks
- Heating fuel tanks for consumptive purposes on the premises and less than 1,100 gallons
- Motor fuel or motor oil tanks less than 1,100 gallons used for non-commercial purposes
- Tanks regulated under the State's Boiler Safety Program
- Tanks regulated under the Accidental Release Prevention Program

For more information on Aboveground Storage Tanks go to the Tank Management Branch web site: <http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/ast>

Boiler Safety

All boilers and pressure vessels that exceed certain size limitations located in “places of public assembly” are required to have a current operating certificate prior to operation. The scope of boilers and pressure vessels that are exempt from inspection can be found in Del Code Title 29 §8028.

The installing contractor is required to submit an “Installation Registration Form” for all new boilers and pressure vessels they install, and in addition, an “operational test report”

for all new boiler installations. These forms can be found as exhibits in the 15th Edition of the Boiler Safety Rules and Regulations. Contact Boiler Safety at (302) 744-2735 for any questions you may have for boiler and pressure vessel installations.

Department of Transportation (DelDOT)

The Mid-Atlantic Biodiesel Company proposes to build a 22,000 square foot plant on a 2.43-acre parcel (Tax Parcel No. KH-04-018.11-50.00-000) on the east side of School Lane (Kent Road 40) in the Town of Clayton. The plant would be used to manufacture biodiesel fuel and glycerin from soybean oil.

The proposed plant will require an entrance plan and permit and the applicant has already met with the DelDOT Subdivision Engineer, Mr. Drew Boyce, in this regard. This early coordination is appreciated. The applicants' engineer or surveyor should contact our Subdivision Manager, Mr. George Shaw, to continue that coordination. Mr. Shaw may be reached at (302) 760-2261.

As preliminary comments, DelDOT noted that the existing railroad grade crossing at the site entrance will have to be removed and that the plant entrance will have to be designed to separate it from the adjacent Southern States entrance. It is likely that curbing will be required. The applicant will be required to maintain traffic on School Lane during their entrance construction and the means by which they will do so will have to be addressed in the entrance plans.

An important factor in designing the site entrance is the amount of traffic, measured in vehicle trips per day, expected to use the entrance. The applicant will have to supply this information to us and to their engineer or surveyor. The Institute of Transportation Engineers publishes a report that is used as a standard reference in this regard but because of the wide variation in the uses studied, its data on manufacturing facilities is not especially useful.

State Historic Preservation Office (SHPO)

There are remains of the past railroad office and other structures within this area. It appears on the proposed plan that these remains will not be disturbed, which SHPO prefers because of the historic archaeological resources. If they will be disturbed, please contact the SHPO office at 302-739-5685 so that they can document them. There is a potential Clayton Historic District that has been determined eligible for listing in the National Register of Historic Places. This district is located immediately to the north and east of the proposed development site. The subject site was historically industrial (railroad use), so there is no objection to the industrial use. However (though it's hard to decipher from the plan) SHPO would prefer that the building be designed to be compatible to the surrounding area and its scale not be large and high that it affects the nearby residential context of the potential historic district. The SHPO office would be happy to assist with any design questions in regard to the design's effects on the nearby

historic resources. There is also a National Register listed property southwest of the subject site. All the above suggestions relate to this historic property as well.

Delaware State Fire Marshals Office

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

Fire Protection Water Requirements:

- Water distribution system capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
- Where a water distribution system is proposed for (Storage/Industrial/Mercantile) sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

Fire Protection Features:

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sq.ft., 3-stories or more or over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR

Accessibility

- All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from School Lane must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- If the use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

Gas Piping and System Information:

- Provide type of fuel proposed, and show locations of bulk containers on plan.

Required Notes:

- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.delawarestatefiremarshal.com technical services link, plan review, applications or brochures.

Public Service Commission

In reference to water, the planned facility is within the Town of Clayton CPCN so no additional action is needed on this issue.

Natural Gas relocation and installation plans must be reviewed as part of Pipeline Safety requirements. Developer should check with natural gas provider and with Malak Michael, Delaware Public Service Commission, 861 Silver Lake Blvd. Suite 100, Dover, Delaware 19904. 302-739-2613

Department of Agriculture

The Department of Agriculture is encouraged to see the project moving forward and they support the efforts to establish a bio-diesel operation within Delaware.

It is strongly encouraged that a diverse landscape plan with lots of screening and buffers be added to the plan.

Again, thank you for meeting with State agencies regarding this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in blue ink that reads "Constance C. Holland". The signature is fluid and cursive, with the first name "Constance" being more prominent.

Constance C. Holland, AICP
Director

CC: Town of Clayton